

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A process for preparing an unsaturated carboxylic acid anhydride, comprising:

reacting an unsaturated carboxylic acid and a lower aliphatic carboxylic acid anhydride in the presence of:

a catalyst wherein said catalyst comprises a metal salt and said metal salt comprises an anionic organic compound which has at least one carboxyl group; and

a stabilizer,

wherein said catalyst comprises at least one cation selected from the group consisting of Cr, Zn, Ca, Zr, Ti, Na, La, and Hf.

Claim 2 (Canceled)

Claim 3 (Currently Amended): The process according to Claim 1, wherein said catalyst comprises at least one cation selected from the group consisting of Cr, ~~Zn, Cu, Ca,~~ Zr, Ti, Na, ~~La, Hf,~~ and mixtures thereof.

Claim 4 (Canceled)

Claim 5 (Previously Presented): The process according to Claim 1, wherein said catalyst comprises a metal salt and said metal salt comprises an anionic organic compound which has at least one group selected from the group consisting of carboxylic acid, dicarboxylic acid, beta-ketocarboxylic acid, beta-diketone and mixtures thereof.

Claim 6 (Previously Presented): The process according to Claim 1, wherein said catalyst is selected from the group consisting of chromium acetate, zirconium acetylacetonate, titanium acetylacetonate and mixtures thereof.

Claim 7 (Previously Presented): The process according to Claim 1, wherein the unsaturated carboxylic acid anhydride is methacrylic anhydride.

Claim 8 (Previously Presented): The process according to Claim 1, wherein the lower aliphatic carboxylic acid anhydride is acetic acid anhydride.

Claim 9 (Previously Presented): The process according to Claim 1, wherein the unsaturated carboxylic acid is methacrylic acid.

Claim 10 (Previously Presented): The process according to Claim 1, wherein the stabilizer is selected from the group consisting of hydroquinone, hydroquinone monomethyl ether, topanol O, topanol A, phenothiazine, N,N'-diphenyl-p-phenylene diamine, and a mixture thereof.

Claim 11 (Previously Presented): The process according to Claim 1, further comprising distilling the unsaturated carboxylic acid anhydride.

Claim 12 (Previously Presented): The process according to Claim 1, further comprising separating the catalyst from the unsaturated carboxylic acid anhydride.

Claim 13 (Previously Presented): The process according to Claim 1, wherein a molar ratio of the carboxylic acid anhydride to the unsaturated carboxylic acid ranges from 0.5 to 1.

Claim 14 (Previously Presented): The process according to Claim 1, wherein a molar ratio of the carboxylic acid anhydride to the unsaturated carboxylic acid ranges from 0.55 to 0.65.

Claim 15 (Currently Amended): A process for preparing methacrylic anhydride, comprising:

reacting methacrylic acid and acetic anhydride in the presence of:

a catalyst; and

a stabilizer,

wherein said catalyst comprises at least one cation selected from the group consisting of Cr, Zn, Ca, Zr, Ti, Na, La, and Hf.

Claim 16 (Currently Amended): The process according to Claim 15, wherein said catalyst comprises a metal salt and said metal salt comprises at least one cation selected from the group consisting of Cr, ~~Zn, Cu, Ca~~, Zr, Ti, ~~Na, La, Hf~~, and mixtures thereof.

Claim 17 (Previously Presented): The process according to Claim 15, wherein said catalyst comprises a metal salt and said metal salt comprises an anionic organic compound which has at least one carboxyl group.

Claim 18 (Previously Presented): The process according to Claim 15, wherein said catalyst comprises a metal salt and said metal salt comprises an anionic organic compound

which has at least one group selected from the group consisting of carboxylic acid, dicarboxylic acid, beta-ketocarboxylic acid, beta-diketone and mixtures thereof.

Claim 19 (Previously Presented): The process according to Claim 15, wherein said catalyst is selected from the group consisting of chromium acetate, zirconium acetylacetonate, titanium acetylacetonate and mixtures thereof.

Claim 20 (Previously Presented): The process according to Claim 15, wherein the stabilizer is selected from the group consisting of hydroquinone, hydroquinone monomethyl ether, topanol O, topanol A, phenothiazine, N,N'-diphenyl-p-phenylene diamine, and a mixture thereof.